

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles comprising micelles of retinoic acid coated with an inorganic salt of polyvalent metal, the method comprising:

dispersing retinoic acid dissolved in a lower alcohol in an aqueous alkali solution;

adding a nonionic surfactant to the dispersion to form a mixed micelle;

adding to the micelle a halide or acetate of divalent metal along with a carbonate or phosphate of alkali metal so that a molar ratio of the former to the latter is 1:0 to 1:1.0, thereby depositing a coating of the inorganic salt of the polyvalent metal on a surface of the micelle; and

adjusting an average particle size of the resulting nanoparticles to 5 to ~~[[300]]~~
106.4 nm.

2. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with an inorganic salt of polyvalent metal according to claim 1, wherein the coating of the inorganic salt of the polyvalent metal is calcium carbonate, zinc carbonate, or calcium phosphate coating.

3. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with an inorganic salt of polyvalent metal according to claim 1, wherein the halide or acetate of divalent metal is calcium halide, zinc halide, calcium acetate or zinc acetate.

4. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with an inorganic salt of polyvalent metal according to

claim 3, wherein the calcium halide or the zinc halide is selected from the group consisting of calcium chloride, calcium bromide, calcium fluoride, calcium iodide, zinc chloride, zinc bromide, zinc fluoride and zinc iodide.

5. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with an inorganic salt of polyvalent metal according to claim 1, wherein the carbonate or phosphate of alkali metal is selected from the group consisting of sodium carbonate, potassium carbonate, sodium phosphate, and potassium phosphate.

6. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with an inorganic salt of polyvalent metal according to claim 1, wherein the lower alcohol is methanol or ethanol.

7. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with an inorganic salt of polyvalent metal according to claim 1, wherein the nonionic surfactant is polyoxyethylene (20), sorbitan monooleate, polyoxyethylene (20) sorbitan monolaurate, polyoxyethylene (20) sorbitan monostearate, polyoxyethylene (20) sorbitan monopalmitate, polyoxyethylene (20) sorbitan trioleate, polyoxyethylene (8) octylphenylether, polyoxyethylene (20) cholesterol ester, polyoxyethylene (30) cholesterol ester or polyoxyethylene hydrogenated castor oil.

8. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with calcium carbonate claimed in claim 1, comprising micelles of retinoic acid coated with calcium carbonate, the method comprising;
dispersing retinoic acid dissolved in a lower alcohol in an aqueous alkali solution;

adding a nonionic surfactant to the dispersion to form a mixed micelle;
adding to the micelle calcium chloride and sodium carbonate so that a molar ratio of the former to the latter is 1:0 to 1:1.0, thereby depositing a coating of calcium carbonate on a surface of the micelle; and
adjusting the average particle size of the resulting nanoparticles to 5 to ~~[[300]]~~ 106.4 nm.

9. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with calcium carbonate according to claim 8, wherein the lower alcohol is methanol or ethanol.

10. (Currently amended) The method for ~~adjusting a particle size of~~ producing retinoic acid nanoparticles coated with calcium carbonate according to claim 8, wherein the nonionic surfactant is polyoxyethylene (20) sorbitan monooleate, polyoxyethylene (20) sorbitan monolaurate, polyoxyethylene (20) sorbitan monostearate, polyoxyethylene (20) sorbitan monopalmitate, polyoxyethylene (20) sorbitan trioleate, polyoxyethylene (8) octylphenylether, polyoxyethylene (20) cholesterol ester, polyoxyethylene (30) cholesterol ester or polyoxyethylene hydrogenated castor oil.

11. (Currently amended) Retinoic acid nanoparticles coated with an inorganic salt of polyvalent metal and having an average particle size of 5 to ~~[[300]]~~ 106.4 nm, obtained by the ~~adjusting~~ producing method according to any of claims 1 to 7.

12 (Currently amended) Calcium carbonate-coated retinoic acid nanoparticles obtained by the ~~adjusting~~ producing according to any of claims 8 to 10 and having an average particle size of 5 to ~~[[300]]~~ 106.4 nm.

13. (Currently amended) Calcium carbonate-coated nanoparticles having an average particles size of 5 to ~~[[300]]~~ 106.4 nm and comprising retinoic acid micelles coated with calcium carbonate.

14. (Withdrawn) Zinc carbonate-coated nanoparticles having an average particles size of 5 to 300 nm and comprising retinoic acid micelles coated with zinc carbonate.

15. (Withdrawn) Calcium phosphate-coated nanoparticles having an average particles size of 5 to 300 nm and comprising retinoic acid micelles coated with calcium phosphate.